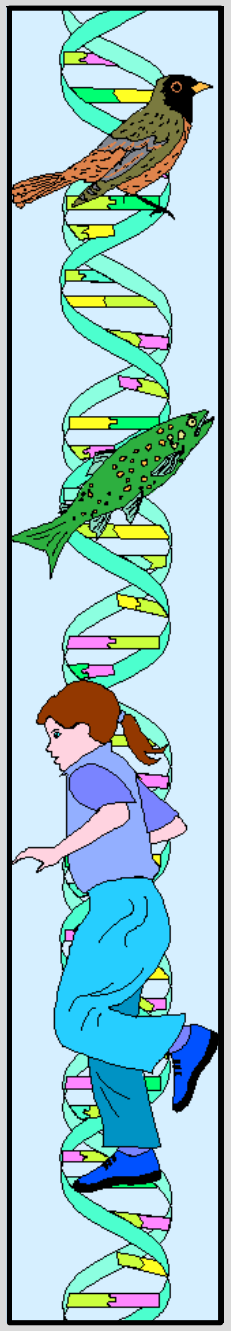
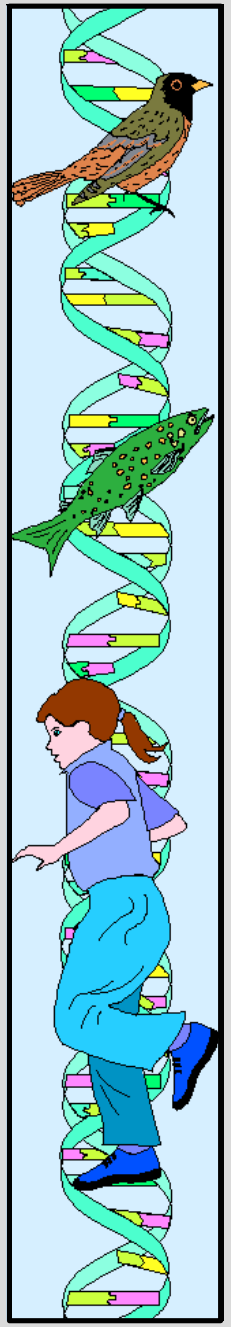
Welcome and Overview

- Welcome
- Sponsoring Projects
  - Astrobiology, Cassini, Galileo, Mars
  - Outer Planets / Solar Probe
  - Space & Earth Science Programs Directorate
- Logistics
  - badges
  - videotaping
  - videoconferencing: Blair High School
- Lunch, ERC and SFOF
- Evaluations and Give-aways
- Classroom Bridging Session (5:30 - 7:30)



Overview

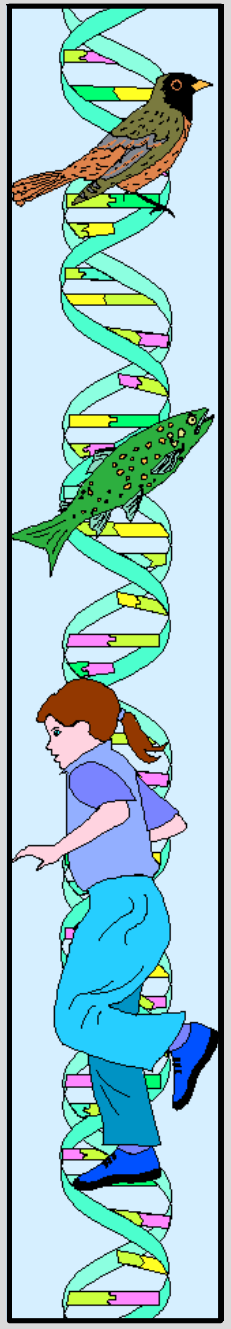
Why are we interested in studying the origin of life from a scientific perspective?



QuickTime™ and a decompressor are needed to see this picture.

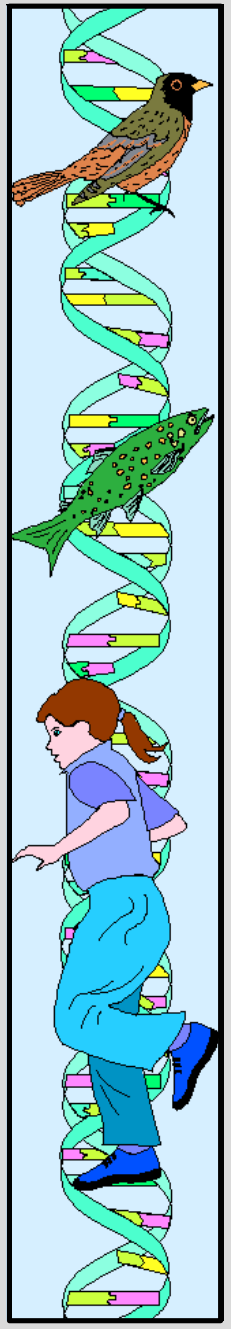
Models of how and where life began on Earth:

- **Isolated near-surface "pools"**
  - **solar energy**
  - **reducing environment**
  - **photosynthetic organisms**
- **Hot, deep-sea vents**
  - **hydrothermal energy**
  - **reducing environment**
  - **chemosynthetic organisms**
- **Other environments?**



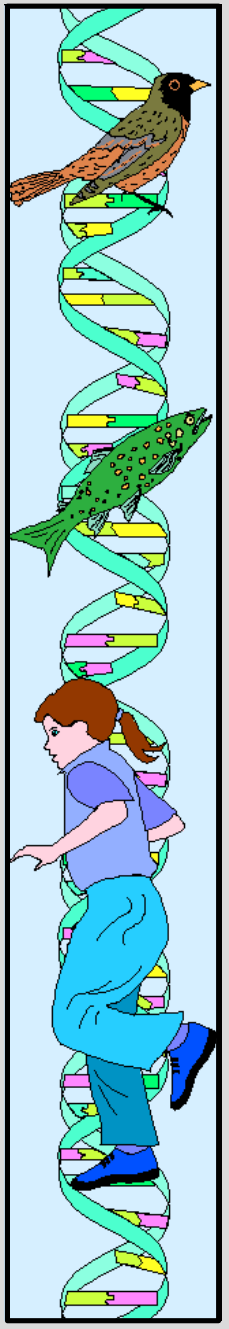
What “Ingredients” are necessary for life to exist?

- **Water**
- **Carbon**
- **Energy**



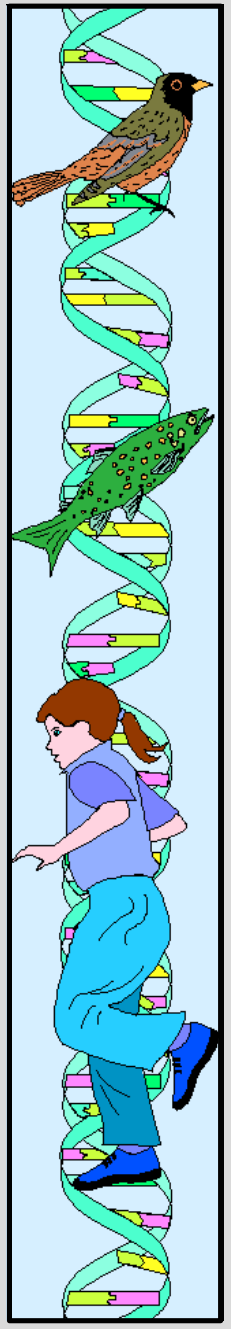
Do these Ingredients occur elsewhere in the Solar System?

- Mars
- Europa
- Titan
- Comets



What if life is found in the solar system?

- exploration of other environments that can support life
- the probability of life in other solar systems
- distinguish between “origin” models



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So what's the game plan?

- <u>Defining</u> Life
- <u>Locating</u> Life
- Comets
- "Planets" of Interest
  - Europa
  - Mars
  - Titan
- The Search for Speck....